ABSTRACT

The invention concerns a cyclic method for separating at least one chemical element E1 from at least one chemical element E2 from an aqueous solution containing said elements, which employs a mixture of two extractants operating in non-overlapping chemical fields.

Each cycle of said method comprises: a) co-extracting elements E1 and E2 by means of an organic phase containing a first extractant suited to causing the migration of said elements into said organic phase; b) adding to the organic phase a second extractant suited to selectively retaining the element(s) E2 in said organic phase during step c): c) selectively stripping the element(s) E1 from the organic phase; d) selectively stripping the element(s) E2 from the organic phase; e) separating the first and second extractants present in said organic phase at the end of step d).